

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE 4949-A Cox Road, Glen Allen, Virginia 23060 (804) 527-5020 FAX (804) 698-4178 www.deq.virginia.gov

Ann F. Jennings Secretary of Natural and Historic Resources David K. Paylor Director (804) 698-4000

James Golden Regional Director

SOLID WASTE FACILITY PERMIT PERMIT NUMBER 572

Facility Name: Middle Peninsula Landfill and Recycling Facility

Facility Type: Sanitary Landfill Latitude: N 37° 31' 08"

Site Location: Gloucester County, Virginia Longitude: W 76° 31' 15"

Location Description: The facility is located approximately 1.5 miles north of the community of Adner, Virginia, in Gloucester County, Virginia. The site is adjacent to U.S. Route 17 and Virginia Route 601. Access to the landfill is provided from U.S. Route 17.

Background: The facility is owned by Gloucester County and operated by Waste Management Disposal Services of Virginia, Inc. The sanitary landfill serves Virginia, the District of Columbia, Maryland, Delaware, Tennessee, and Waste Management of Virginia, Inc. (or their affiliates) facilities.. The wastes accepted include those wastes identified in Module II, which is based on the information provided on DEQ Form SW PTB. dated August 31, 2021.

The total site property owned by Gloucester County is approximately 510 acres. The total lined disposal area is approximately 225 acres. Two intermittent streams are located in the southern portion of the site and flow into Woods Mill Swamp located about 2500 feet from the southern edge of the site and drains into Poropotank River. Two intermittent streams are located in the northern portion of the site and flow about 12,000 feet into the Poropotank River.

The disposal area is located in two areas on the property, designated as Area A (approximately 165.6 acres and 34.2 million cubic yards of capacity) and Area B (approximately 59 acres and 8.5 million cubic yards of capacity). The total capacity of the Middle Peninsula Landfill and Recycling Facility, as provided in the Design Report, Part B Attachment III, is approximately 47 million cubic yards (cy), with 42.7 million cy available. Area B is not yet constructed.

The total estimated capacity of the following cells, as provided in the Design Report, Part B Attachment III, is as follows:

Phase	Cells(acres)	Lined Area	Estimated Capacity	Projected Life
		(acres)	(million cy)	(years)
Landfill Area A				
1-3	1-11	101.4	10.9	16.0
4	12-13	16.5	3.4	5.1
5	14-15	16.3	5.0	7.8
6	16-17	15.7	3.9	6.1
7	18-19	15.7	4.3	6.7
8	N/A	0	6.7	10.2
Landfill Area B				
9	20-23	39.2	1.5	2.2
10	24-26	19.8	2.9	4.5
11	N/A	0	4.1	6.3

The estimated site life is approximately 60.3 years, which is based on the daily disposal limit of 4000 tons per day (tpd), with a maximum disposal limit of 693,000 tons per year according to the Host Agreement with Gloucester County, and operating 286 days per year. This is approximately 2,423 tpd for 286 days per year. The site expects to reach capacity in the fall of 2055.

Permit Modification: This modification to the permit would allow increasing the daily disposal limit from 2,000 tons per day to 4,000 tons per day, renaming the facility's sedimentation basins, and approving a revised Gas Management Plan/Gas Remediation Plan. All previous permit modifications are outlined in detail in Module I, Section I.G.

THIS IS TO CERTIFY THAT:

Gloucester County P.O. Box 329 Gloucester, Virginia.23061

is hereby granted a permit to construct, operate, and maintain the facility as described in the attached Permit Modules I, II, III, X, XI, XII, and XIII, and Permit Documents incorporated by reference. These Permit Modules and Permit Documents are as referenced hereinafter and are incorporated into and become a part of this permit.

The herein described activity is to be established, modified, constructed, installed, operated, used, maintained, and closed in accordance with the terms and conditions of this permit and the plans, specifications, and reports submitted and cited in the permit. The facility shall comply with all regulations of the Virginia Waste Management Board. In accordance with Chapter 14, § 10.1 - 1408.1(D) of the Code of Virginia, prior to issuing this permit, any comments by the local government and general public have been investigated and evaluated and it has been determined

that the facility poses no substantial present or potential danger to human health or the environment. The permit contains such conditions and requirements as are deemed necessary to comply with the requirements of the Virginia Code, the regulations of the Board, and to prevent substantial or present danger to human health or the environment.

Failure to comply with the terms and conditions of this permit shall constitute grounds for the revocation or suspension of this permit and for the initiation of necessary enforcement actions.

The permit is issued in accordance with the provisions of 10.1-1408.1.A, Chapter 14, Title 10.1, Code of Virginia (1950) as amended. Variances that have been approved for this facility are included in Permit Attachment I-1.

Issued: August 15, 1994 (Initial Issuance)				
Modification No. 1: June 1, 1995 (Minor)				
Modification No. 2: November 5, 1996 (Minor)				
Modification No. 3: December 5, 1997 (Minor)				
Modification No. 4: March 16, 2000 (Minor)				
Modification No. 5: December 17, 2003 (Minor)				
Modification No. 6: May 21, 2010 (Minor)				
Modification No. 7: October 31, 2013 (Minor)				
Modification No. 8: April 16, 2015 (Minor)				
Modification No. 9: February 11, 2016 (Minor)				
Modification No. 10: February 16, 2016 (Minor)				
Modification No. 11: July 5, 2017 (Major)				
Modification No. 12: February 26, 2018 (Minor)				
Modification No. 13: September 12, 2019 (Minor)				
Modification No. 14: June 15, 2020 (Minor)				
Modification No. 15: April 5, 2021 (Minor)				
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APPROVED:				
	Kyle Ivar Winter, P.E.			
	Deputy Regional Director			
DATE:				
	Modification No. 16			

PERMIT MODULES REFERENCE LIST

PERMIT MODULE I – GENERAL PERMIT CONDITIONS
PERMIT ATTACHMENT I-1, PREVIOUS PERMIT APPROVAL LETTERS

PERMIT MODULE II - CONDITIONS OF OPERATION

PERMIT MODULE III - SANITARY LANDFILL DESIGN

PERMIT MODULE X – DETECTION MONITORING

PERMIT MODULE XI – ASSESSMENT MONITORING

PERMIT MODULE XII - CLOSURE

PERMIT MODULE XIII - POST CLOSURE CARE

PERMIT MODULE XIV - CORRECTIVE ACTION

PERMIT DOCUMENTS

The documents listed below are hereby incorporated into this permit and the permittee is subject to all conditions contained therein. It is the responsibility of the permittee to properly maintain and update these documents. Any version with a revision date other than as listed below is not considered to be the official approved version and is subject to Department review and approval prior to being recognized as the "permitted" version.

1. Part B Application:

- a. *Design Plans (list Plans official title)*, prepared by Golder Associates, Inc., last revised August 31, 2021 (Attachment III).
- b. *Closure Plan*, prepared by Golder Associates, last revised August 31, 2021 (Attachment IV).
- c. *Post-Closure Plan*, prepared by Golder Associates, Inc., last revised September 23, 2016 (Attachment V).
- d. *Design Report*, prepared by Golder Associates, Inc., last revised August 31, 2021 (Attachment VI).
- e. Construction Quality Assurance Plan and Technical Specifications, prepared by Golder Associates, Inc., last revised March 2, 2020 (Attachment VII).
- f. *Leachate Management Plan*, prepared by Golder Associates, Inc., last revised September 23, 2016 (Attachment VIII).
- g. Landfill Gas Management Plan, prepared by Golder Associates, Inc., last revised November 11, 2021; Landfill Gas Remediation Plan, prepared by Golder Associates, Inc., last revised November 11, 2021 (Attachment IX).
- h. *Groundwater Monitoring Plan*, prepared by Golder Associates, Inc., last revised September 26, 2013 (Attachment X).

The following documents have been submitted to satisfy permit or regulatory requirements; however, are considered reference documents and are not incorporated into Permit No. 572. This list may not be all-inclusive.

- 1. *Middle Peninsula Landfill and Recycling Facility Solid Waste Permit Application Part A*, prepared by RUST Environmental and Infrastructure, dated July 1, 1993.
- 2. Construction Quality Assurance Report, Cell 12, prepared by Draper Aden Associates, dated November 30, 2020.
- 3. *Construction Quality Assurance Report, Cell 13*, prepared by Draper Aden Associates, dated July 19, 2017.
- 4. *Construction Quality Assurance Report, Cell 11*, prepared by Draper Aden Associates, dated February 17, 2014.
- 5. Construction Quality Assurance Report, Cell 10, prepared by Draper Aden Associates, dated October 1, 2010